

Application for Certification of an <u>ADDITION ("ADD-ON")</u> to an existing resource as an Eligible Energy Resource Under the Delaware Renewable Energy Portfolio Standard

1.	Name of Facility Ruberto Residence - R. Ruberto						
2.	Address11 Creek Dr, Millsboro, DE 19966						
	Is the facility located within the PJM control area? If No, does the Facility have import capabilities?						
3.	Name of Owner_Robert Ruberto						
	Mailing Address same as Facility Address						
	Phone (302) 218-7317						
	Fax						
	Emailbruberto@verizon.net			_			
4.	Name of Operatorsame as Owner						
	Address						
				_			
	Phone						

	Fax								
	Email								
5.	Name of Contact Person Allyson Browne								
	Address201 California Street, Suite 630, San Francisco, CA 94111								
	Phone_ (415) 763 - 7732								
	Fax								
	Email_applications@srectrade.com								
6.	Name of REC/SREC Owner Same as Owner								
Address									
	Phone								
	Fax								
	Email								
7.	List all PJM-EIS GATS State Certification Numbers assigned to this facility: DE-99260-SUN-01-00								
	PA-10670-SUN-I DC-101060-SUN-I								
8.	Operational Characteristics:								
	Fuel Types Used (check all that apply):								
	lacksquare Gas combustion from the anaerobic digestion of organic material								
	☐ Geothermal								

Please note: ADD-ONs must be separately metered.
☑ Yes □ No
Can the output from the "ADD-ON" customer-sited generation be separately metered?
☐ Yes ☑ No
Is the Applicant's facility a community owned generating facility ^{vi} ?
☑ Yes □ No
Is the Applicant's facility customer-sited generation ?
If co-firing with fossil fuels, attach the allocation formula on file with PJM.
If co-firing with fossil fuels, co-fire start date_n/a
ADD-ON Final Approved Interconnection Date 07/13/2016
If multiple fuel types are utilized, attach the formula for computing the proportion of output per fuel type by megawatts per hour generated.
Rated Capacity of ADD-ON (Megawatts - DC) 0.0045 MW (4.5 kW)
If co-firing, provide the formula on file with PJM Environmental Information Services, Inc. (PJM-EIS) ^{n/a}
☐ Wind
☑ Solar
☐ Qualified Methane Gas captured from a landfill gas recovery system ^{iv}
☐ Qualified Hydroelectric ⁱⁱⁱ
☐ Qualified Fuel Cells ⁱⁱ
☐ Qualified Biomass ⁱ
☐ Ocean, wave or tidal actions, currents, or thermal differences

9.

- 1. I have made reasonable inquiry, and the information contained in this Application is true and correct to the best of my knowledge, information and belief.
- 2. I am authorized to submit and execute this Application and to bind myself and/or my company to the representations contained herein.
- 3. I/my company agree(s) to comply with and be subject to the jurisdiction of the Public Service Commission of the State of Delaware for any matters arising out of my submission of this Application or the granting of the Application.
- 4. In the event that any of the information contained in this Application changes pending the consideration of this Application or after the Application is granted, I/my company will amend the Application to provide the Commission with such changed information.
- 5. I acknowledge that if any of the representations made in this Application or in any amendment thereto are found to be untrue when made, I/the company may be subject to sanctions, including but not limited to monetary fines and/or the revocation of any Certificate granted as a result of the representations made in this Application.

Signature: _		Ully	son	Growne	,	
5.	05/3	<i>ו</i> 24/201	7			
Date:	00/2	-1 /201	,			

Required Documentation:

- If the facility is customer-sited generation, attach a copy of the "Accepted Completed Solar System Interconnection Application" for the ADD-ON
- If the facility is a community-owned energy generating facility, attach a list of contact information (names, address, phone number, fax, and email) of all owners or customers who are sharing the output of the generator.
- One copy of U.S. Department of Energy, Energy Information Administration Form EIA-860, if rated capacity is >1.0 MW

ⁱ "Qualified Biomass" means electricity generated from the combustion of biomass that has been cultivated in a sustainable manner as determined by Delaware Department of Natural Resources and Environmental Control (DNREC), and is not combusted to produce energy in a waste to energy facility or in an incinerator.

"Qualified Fuel Cells" means electricity generated by a fuel cell powered by Renewable Fuels, as that term is defined in Section 1.0 of the Rules and Procedures to Implement the Renewable Energy Portfolio Standard, Delaware Public Service Commission Regulation Docket No. 56.

"" "Qualified Hydroelectric" means electricity generated by a hydroelectric facility that has a maximum design capacity of 30 megawatts or less from all generating units combined that meet appropriate environmental standards as determined by DNREC.

"" "Qualified Methane Gas" means electricity generated by the combustion of methane gas captured from a landfill gas recovery system; provided, however, that:

- 1. Increased production of landfill gas from production facilities in operation prior to January 1, 2004 demonstrates a net reduction in total air emissions compared to flaring and leakage;
- 2. Increased utilization of landfill gas at electric generating facilities in operation prior to January 1, 2004 (i) is used to offset the consumption of coal, oil, or natural gas at those facilities, (ii) does not result in a reduction in the percentage of landfill gas in the facility's average annual fuel mix when calculated using fuel mix measurements for 12 out of any continuous 15 month period during which the electricity is generated, and (iii) causes no net increase in air emissions from the facility; and
- 3. Facilities installed on or after January 1, 2004 meet or exceed 2004 Federal and State air emission standards, or the Federal and State air emission standards in place on the day the facilities are first put into operation, whichever is higher.

[&]quot;Customer-sited Generation" means a generating unit that is interconnected on the end use customer's side of the retail electricity meter in such a manner that it displaces all or part of the metered consumption of the end-use customer.

[&]quot;Community-owned Energy Generating Facility" means a renewable energy generating facility that has multiple owners or customers who share the output of the generator, which may be located either as a stand-alone facility or behind the meter of a participating owner or customer. The facility shall be interconnected to the distribution system and operated in parallel with an electric distribution company's transmission and distribution facilities.

(For Use with Generators less than 100 kW DC)

An applicant (Generator Owner) makes application to Delaware Electric Cooperative to install and operate a generating facility less than 100 kW DC and interconnected with the Delaware Electric Cooperative utility system.

Section 1, Applicant Informati	on Directly Inter	connected to	the Ger	nerating System			
Is the following system:	Leased	or		Member Owned			
Type of Application:	Initial	or		Addition/Upgrade			
Name:Bob Ruberto							
Mailing Address:_11 Creek Drive							
City:Millsboro	State:	DE		_ZipCode:_19966			
Email Address: _bruberto@verizor	n.net						
Facility Location (if different from	above):						
Telephone: Area Code _302 Nur							
Delaware Electric Cooperative Acc	count No.: :40	+.8201		Rate Code: 162			
Section 2, Equipment Contrac	<u>ctor</u>						
Name:Alutech United Inc							
Mailing Address:117 Dixon St _	*						
City:_Selbyville	Sta	te:DE		ZipCode:19975			
Email Address: Haleigh@greenstreetsolar.com Telephone (Daytime): Area Code 302 Number _297-8174							
Section 3, General Service Re	quirements						
If different from the existing servi	ce, what size service	e will the genera	ation faci	ility require?			
200A400A	600A	800A					
If this is a new account for a Solar	System, what Volta	age/Phase will b	e require	ed?			
120/240V-1Ph 120	/208V-1Ph]120/208V-3Ph		277/480V-3Ph			

Section 4, Application Fee

This application fee is applicable for all new PV applications received on or after May 20, 2016. The cost will be \$50.00 per application (new and/or upgrade) for systems 25 kW DC or less. For systems over 25 kW DC the fee will be \$50.00 plus \$1.00 kW DC over 25 kW DC. All interconnection applications submitted to DEC shall be

Delaware Electric Cooperative Generator Interconnection Application – Short Form (For Use with Generators less than 100 kW DC)

accompanied with the appropriate fee made out to Delaware Electric Cooperative and are non-refundable. No applications will be considered without the fee.

Section 5, Generator Type
Is Generator powered from a Renewable Energy Source: Yes No
Type of Energy Source (if applicable): Solar Wind Other
Other generator energy source: Diesel Natural Gas Fuel Oil Other:
Will excess power be exported to Delaware Electric Cooperative? Yes No
(Typical) Maximum Export:4kW DC/AC
2 Yr. Avg. Annual Usage (kWh): Forecast Annual kWh:
(Note: The Annual Forecast MUST be completed using 4.5 peak sun light hours per days)
Section 5, Generator Technical Information
Please fill out the Initial Rating information if there is currently no generating facility on-site. If adding a generating facility to an existing facility, fill out the Initial Rating Information, the Added Rating Information and the Total Rating Information
Generator (or solar collector) Manufacturer, Model Name & Number: _SolarWorld 300w MONO(A copy of Generator Nameplate and Manufacturer's Specification Sheet may be substituted)
Inverter Manufacturer, Model Name & Number (if used):Enphase M-250 (A copy of Inverter Nameplate and Manufacturer's Specification Sheet may be substituted)
Initial Rating: DC System Design Capacity: 3.5 (kW) 3500 (kVA) Inverter Capacity: 3.8 (Maximum AC kW) AC System Design Capacity: 3.325 (kW) 3325 (kVA)
Added Rating: DC System Design Capacity:4.5 (kW)4500_ (kVA) Inverter Capacity:3.75 (Maximum AC kW) AC System Design Capacity:3.75 (kW)3750 (kVA)
Total Rating (Existing and New): DC System Design Capacity: 8 (kW) 8000 (kVA) Inverter Capacity: 7.55 (Maximum AC kW) AC System Design Capacity: 7.075 (kW) 7075 (kVA)

(For Use with Generators less than 100 kW DC)

Generator Disconnect Switch:

Name (print): Bob Ruberto

A <u>lockable</u> disconnect device shall be installed within 3 feet of the DEC meter and accessible at all times by DEC personnel, by and at the cost of the owner.

Section 6, Generator/Equipment Certification

Generating systems that utilize inverter technology must be compliant with *IEEE 929* and *Underwriters Lab. UL 1741*. Generating systems that use a rotating machine must be compliant with Delaware Electric Co-op's *Technical Requirements For Parallel Operation of Member Owned Generation* document. By signing below, the Applicant certifies that the installed generating equipment meets the appropriate preceding requirement(s) and can supply documentation that confirms compliance.

Date: 5/27/16

Signed (Applicant):	alet Rules		
Section 7, Aggregated Meter In	formation (If Applicable)		
the credit; however, DEC may elect	to make payment to the account so	order in which credits shall be applied (We don't apply erving the Generating System) Additionally, the following al 2-year Annual Average kWh to ensure the new system	ng
1 - DEC Member Name		Rate Code:	
DEC Account No.:	Capacity (DEC):	2 Yr Annual Average kWh:	
2 - DEC Member Name		Rate Code:	
DEC Account No.:	Capacity (DEC):	2 Yr Annual Average kWh:	
3 - DEC Member Name		Rate Code:	
DEC Account No.:	Capacity (DEC):	2 Yr Annual Average kWh:	
4 - DEC Member Name		Rate Code:	
DEC Account No.:	Capacity (DEC):	2 Yr Annual Average kWh:	

(For Use with Generators less than 100 kW DC)

Any additional meters associated with this aggregated system must be supplied on a separate sheet in the same format.

Prior to installation send the completed Pages 1-3 to Delaware Electric Cooperative, Attn: Troy Dickerson, Manager of Engineering: Phone: (302) 349-3125 Email: tdickerson@decoop.com or mail to P.O. Box 600 Greenwood, DE 19950

Delaware Electric Cooperat	tive: 🔀 Has Approved 🔲 Has N	lot Approved this Prelim	inary Application.
lame :	Printe de airead he Part Maha	Date:	6/3/16
Tom	DN: cn=Tom Wright, o, ou=Delaware Electric Coop,		
ignature:Wright	email=twright@decoop.com, c=US Date: 2016.06.03 15:14:58-04'00'		
Reason of Not Approving:			

Delaware Electric Cooperative Generator Interconnection Application – Short Form (For Use with Generators less than 100 kW DC)

Section 9, Installation Details Generating System will be installed by: Owner State Licensed Electrician
Installing Electrician: James Rodrigue Firm: _Alutech United Inc License No.: T1-0005686
Mailing Address: _117 Dixon St
City: _Selbyville State: DE Zip Code: 19975
Telephone with Area Code: _800-233-1144
Installation Date: Interconnection Date:
Supply certification that the generating system has been installed and inspected in compliance with the local Building/Electrical code of the municipality of
Signed (Inspector):
Section 10, Applicant Signature
I hereby certify that, to the best of my knowledge, all the information provided in the Interconnection Application is true and correct.
Name of Applicant (Printed): Date:
Signature of Applicant:Bob Ruberto
Section 11, FINAL Approval or Non-Approval
Delaware Electric Cooperative: Has Approved Has Not Approved this Interconnection Application.
Name:
Signature: Wright email=twright@decoop.com, c=US Date: 2016.07.13 10.53.13 -04'00'
Reason of Not Approving:

Approval to connect to the Company system indicates only that the minimum requirements for a safe proper interconnection have been satisfied. Such approval does not imply that the Generator Owner's facility meets all federal, state and local standards or regulations.

(For Use with Generators less than 100 kW DC)

Section 12, Internal Checks and Notifications

DEC has performed a site visit and approved the system:	Yes
DEC has installed a Warning Label on or near the service meter:	Yes
Notify Billing Dept. of Interconnected Generation:	Yes
Notify Mapping Dept. of Interconnected Generation:	Yes
Notify Metering Dept. of Interconnected Generation:	Yes
Notify System Protection of Interconnected Generation:	Yes

At completion send Pages 5 - 6 to Delaware Electric Cooperative, Attn: Troy Dickerson, Manager of Engineering: Phone: (302) 349-3125 Email: tdickerson@decoop.com or mail to P.O. Box 600 Greenwood, DE 19950

First State Inspection Agency, Inc. 1001 Mattlind Way Milford, DE 19963

> 1-800-468-7338 302-422-3859

Alutech United, Inc. James Rodrigue PO Box 329 Selbyville, DE 19975

CERTIFICATE

Final Inspection Date:

7/5/16

Application #:

024789

Owner:

Bob Ruberto

Customer Job #:

Occupancy:

Solar 4.5 KW Array

Location:

11 Creek Drive, Winding Creek Village,

Millsboro, Sussex, DE

This certifies that the installation of electrical equipment listed on referenced application has been approved as meeting the requirements of the National Electric Code, utility, municipalities and Agency rules. Any modification, addition or alteration of the electrical system, after the date of final inspection, will require a new application for inspections and certifications.

Chief Electrical Inspector

10. If the Applicant's installation is solar or wind sited in Delaware, is a minimum of 50% of the cost of the renewable energy equipment, inclusive of mounting components, manufactured in Delaware?
Company Name of Installer Company Name of Installer Address Address Address No Laly Laly Signature of Company Representative Halaigh Tingle Print Name of Co. Representative
 *If Yes, please attach the following documentation: A copy of the supplier's invoice showing Delaware manufactured equipment with this facility identified If the supplier's invoice shows only a coded Purchase Order (PO) number, a copy of the company's matching PO that includes the address where the materials were used/installed, must also be supplied If using a master invoice, a record of the draws against the purchased quantity, on the master invoice, must show the address of each use and the quantity of material used
11. If the Applicant's installation is solar or wind sited in Delaware:a. Was the facility physically constructed or installed with a workforce that
consists of an least 75% Delaware residents?
b. Does the installing company employ, in total, a minimum of 75% workers who are Delaware residents?
Altech Child Inc Sen Green Weetsolar Hallyhrys
Company Name of Installer Signature of Company Representative 117 IXM () - Haligh Tingk
Address Print Name of Co. Representative

*If Yes, please attach supporting documentation (see pages 7-8 for details). Please note, in order to qualify for the Labor/Workforce Bonus, at least one of the options (a. or b.) must be met.

Address

Documentation Required for Delaware Labor/Workforce Bonus

- 11. If the Applicant's installation is solar or wind sited in Delaware:
 - a. Was the facility physically constructed or installed with a workforce that consists of at least 75% Delaware residents?

If you answered yes to "a." above, complete the following as evidence.

The following individ	luals (list every e	mployee) wer	re employed by		
Alutech	inited	Inc	DBA Freen Street Solar	_	
Installation Company Name					

as direct labor (physical construction and installation) for this facility: (Attach additional sheets if necessary)

Please complete the following information for all individuals listed above:

Name	Home Address (As per Tax Withholding)	Social Security Number (Last 4 digits only)		
	*			
*		· • •		
	2/4			
al Delaware Resident Emplo	yees: 26 Total N	umber of Employees: $\frac{35}{74\lambda}$		

Documentation Required for Delaware Labor/Workforce Bonus

11. If the Applicant's installation is solar or wind sited in Delaware:

b. Does the installing company ended by Delaware residents?	mploy, in total, a minimum of 75	% of workers who are
If you answered yes to "b." above, co	mplete the following as evidence	<u>:</u> :
Alutean united		Green Street-Solar
employed the following individuals (li project start date until project comple interconnection approval to operate.	etion date). Projects are conside (Attach additional sheets if nece	ered complete upon final essary)
Project Start Date: 6/30/20	Oloproject Complete Date:_	7/13/2016
Employee Full Name	Home Address (As per Tax Withholding)	Social Security Number (Last 4 digits Only)
Total Delaware Resident Employees:	20 Total Number	er of Employees: 35
% of Delaware Residents (Delaware Res	sidents Divided by Total Employee	s): <u>747. </u>

	NAME	STREET ADDRESS	CITY	ST	ZIP	SS#
1	Aaron Woods	22763 Coverdale Road	Seaford	DE	19973	25
2	Adam Ash	36096 Zion Church Road	Frankford	DE	19945	24
3	Antione Johnson	27542 Holly Hock Lane	Seaford	DE	19973	29
4	Brian Reed, Jr.	233 Briarwood Circle	Denton	MD	21629	00
_5	Daniel Fleetwood, III	36157 Millers Neck Road	Frankford	DE	19945	68
6	Daniel Pacini	39096 Zion Church Road	Frankford	DE	19945	75
7	David Linehan	26393 Sea Mist Court	Millsboro	DE	19966	85
8	Derek Dykes	31866 Mountain Laurel Ridge	Laurel	DE	19956	74
9	Donnie Baker Jr.	35359 Danny Drive	Laurel	DE	19956	60
10	Donnie Baker III	35359 Danny Drive	Laurel	DE	19956	58
11	Dustin Brittingham	2 Leah Street	Georgetown	DE	19947	01
12	Erik Diaz-Padilla	105 Caroline St., Unit 6	Ocean City	MD	21842	15
13	Erwin Cordoba-Jimenez	28 W Duke St	Selbyville	DE	19975	71
14	George Carey	36966 Deer Drive	Selbyville	DE	19975	69
15	George Pfaller	24501 Cedar Lane	Georgetown	DE	19947	48
16	Haleigh Tingle	6635 Libertytown Road	Berlin	MD	21811	30
17	James Webb	629 Gun and Rod Club Road	Harrington	DE	19952	63
18	Jason Killen	16502 Old Furnace Road	Georgetown	DE	19947	18
19	Jason Roth	36851 Old Mill Bridge Road	Selbyville	DE	19975	90
20	John Basch	1504 Sharen Drive, Apt. F	Salisbury	MD	21801	96
21	Jose Cordoba	Lazy Lagoon Lot 41	Frankford	DE	19945	42
22	Justin Buoncristiano	1011 Scarborough Ave	Rehoboth Beach	DE	19971	45
23	Lisa Bloom	403 143 rd Street, Unit 5	Ocean City	MD	21842	74
24	Mark Caldwell	1004 Philadelphia Avenue, Unit 5	Ocean City	MD	21842	20
25	Michael Haymond	12640 Beach Hwy.	Greenwood	DE	19950	01
26	Michael Johnson	123 Copperfield Lane	Felton	DE	19943	31
27	Richard Gedon	26170 Skip Jack Ln.	Millsboro	DE	19966	04
28	Richie Wright	5637 Caledonia Drive	Salisbury	MD	21801	40
29	Russell Pfaller	7167 Chatham Manor Way	Pittsville	MD	21850	98
30	Tomas Flores-Rivera	12 Jefferson Court	Seaford	DE	19973	55
31	Tony Jones Jr.	24383 E Dove St.	Seaford	DE	19973	50
32	Tyler Burr	403 143 rd Street, Unit 5	Ocean City	MD	21842	69
33	Tyron Dixon	24691 Nickle Street	Seaford	DE	19958	57
34	W. Jeffrey Timmons	11127 Signature Blvd.	Selbyville	DE	19975	52
35	William Warden, Jr.	26163 Kelly Circle	Seaford	DE	19973	89